

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. **(currently amended):** An isolated lactic acid bacterial strain belonging to the genus *Lactococcus* and isolated from human stool, wherein the bacterial strain is *Lactococcus garvieae* and the bacterial strain has an ability to utilize at least one daidzein compound selected from the group consisting of daidzein glycosides, daidzein, and dihydrodaidzein to produce equol.

2. **(canceled).**

3. **(previously presented):** The isolated lactic acid bacterial strain belonging to the genus *Lactococcus* according to Claim 1, which is *Lactococcus garvieae* 20-92 deposited under FERM BP-10036.

4. **(previously presented):** A composition comprising the isolated lactic acid bacterial strain belonging to the genus *Lactococcus* according to Claim 1 and at least one member selected from the group consisting of daidzein compounds and daidzein compound-containing ingredients.

5. **(original):** The composition according to Claim 4, wherein the daidzein compound-containing ingredient is soybean flour or soy milk.

6. **(original):** The composition according to Claim 4 which is in the form of a beverage or a milk product.

7. **(original):** The composition according to Claim 4 further comprising equol.

8. **(original):** The composition according to Claim 7 which is in the form of a fermentation product of soy milk.

9. **(withdrawn-currently amended):** A method of producing equol comprising the step of letting an isolated lactic acid bacterial strain belonging to the genus *Lactococcus* and isolated from human stool, wherein the bacterial strain is *Lactococcus garvieae* and the bacterial strain has an ability to utilize a daidzein compound to produce equol, act on at least one member selected from the group consisting of daidzein compounds and daidzein compound-containing ingredients.

10. **(canceled).**

11. **(withdrawn):** The method according to Claim 9 wherein said isolated lactic acid bacterial strain belonging to the genus *Lactococcus* is *Lactococcus garvieae* 20-92 deposited under FERM BP-10036.

12. **(withdrawn):** The method according to Claim 9, wherein the daidzein compound-containing ingredient is soybean flour or soy milk.

13. **(canceled).**

14. **(currently amended):** A composition comprising ~~thean~~ isolated lactic acid bacterial strain belonging to *Lactococcus garvieae* according to Claim 1 and an edible or pharmaceutically acceptable carrier.

15. **(new):** The isolated lactic acid bacterial strain belonging to the genus *Lactococcus* according to Claim 1, which has the following characteristics (1) to (15):

- (1) Optimum temperature for growth: 37°C
- (2) Optimum pH for growth: 7.0
- (3) Liquefaction of gelatin: -
- (4) Production of acetoin from pyruvic acid: +
- (5) Hydrolysis of hippuric acid: -
- (6) Hydrolysis of esculin: +
- (7) Pyrrolidonyl arylamidase: +
- (8) α -Galactosidase: -
- (9) β -Galactosidase: -
- (10) β -Glucuronidase: -
- (11) Alkaline phosphatase: -
- (12) Leucine arylamidase: +

(13) Arginine dihydrolase: +

(14) Assimilation of carbon sources

D-Ribose +

L-Arabinose -

D-Mannitol +

D-Sorbitol -

Lactose -

D-Trehalose +

Inulin -

D-Raffinose -

Starch +

Glycogen -

(15) Organic acid composition after utilization of peptone or glucose.